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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,958	03/26/2001	Qiming Chen	10006528-1	9842

7590 07/16/2004

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

REFAI, RAMSEY

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,958

Applicant(s)

CHEN ET AL.

Examiner

Ramsey M Refai

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1-20 are presented for examination.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 4 is not mentioned in the specification. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 and 6-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aggarwal et al (U.S. Patent No. 6,415,318) in view of Massarani (U.S. Patent No. 6,393,484).

5. As per claim 1, Aggarwal et al teach a method for enabling communication between a first agent in a first domain and a second agent in a second domain comprising the steps of:

a coordinator in the first domain (column 2, lines 34-45 and Figure 2, 68; the bridgehead server coordinates the messages by directing to the appropriate client) a send-message service (column 2, lines 24-45) with a service bus (column 2, line 35-45; network); and

the second agent in the second domain communicating with first agent by employing the service bus, the registered send-message service, and the coordinator in the first domain; wherein the method solves the interface diversity problem and does not require a central coordinator (column 3, lines 4-9 and column 10, lines 10-26; the bridgehead server performs these tasks so no central coordinator is needed).

6. Aggarwal et al fail to show a method of registering a service.

7. However Massarani shows a network that includes a DHCP (Dynamic Host Control Protocol) server that registers users by assigning IP addresses (abstract). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Aggarwal et al and Massarani to create a method for enabling communication between a first agent and a second agent by registering a message service because would provide for automated registering of services with a network allowing new services with a network to be added without user intervention.

8. As per claim 2, Aggarwal et al teach a method wherein the step of the second agent in the second domain communicating with first agent by employing the service bus, the registered send-message service, and the coordinator in the first domain includes

the coordinator providing a client-side interface for the send-message service that can be employed by other agents in different domains to communicate with the agents in the first domain; and the second agent in a second domain communicating with an agent in the first domain by employing the client-side interface for the send-message service of the coordinator (column 9, line 60-column 10 line 9).

9. As per claim 3, Aggarwal et al teach a method wherein the step of the second agent in a second domain communicating with an agent in the first domain by employing the client-side interface for the send-message service of the coordinator includes

directing a message from the second agent to the coordinator, which serves as a point of presence for agents in the first domain and the coordinator receiving the message and forwarding the message to the intended recipient agent (column 10, lines 10-26).

10. As per claim 4, Aggarwal et al teach a method wherein the coordinator is a point-of-presence for communication directed to agents in the first domain by agents external to the first domain (column 1, lines 14-19; a bridgehead server located inside the recipient's network).

11. As per claim 6, Aggarwal et al teach a method wherein the service bus is the HTTP service bus (column 6, lines 22-36).

12. As per claim 7, Aggarwal et al teach a method wherein the service bus provides one of dynamic firewall transversal services, access control services, security services, billing services, authentication services, authorization services, and other predefined infrastructure services (column 6, line 49- column 7 line 2).

13. As per claim 8, Aggarwal et al teach a method wherein the coordinator provides one of naming services, resource directory services, and send-message service (column 2, lines 34-45).

14. As per claim 9, Aggarwal et al teach a method wherein the step of directing a message from the second agent includes invoking a send-message (this inherent in message service software/program because in order to use the service to communicate to others you must be able to activate a send message) provided by the service bus (network); wherein the step of the coordinator receiving the message and forwarding the message to the intended recipient agent includes employing a local naming service to forward the message to the first agent (column 2, lines 34-45 and column 3, 23-37).

15. As per claim 10, Aggarwal et al teach a method wherein the step of invoking a send-message service provided by the service bus includes specifying a domain name and receiver agent name (column 8, lines 56-67).

16. As per claim 11, Aggarwal et al teach a method wherein the first agent and the second agent communicate in a publish and subscribe mode (column 8, lines 50-55; the sending client can publish messages without explicitly specifying recipients or having knowledge of intended recipients).

17. As per claim 12, Aggarwal et al teach a method wherein the first domain is a first enterprise and the second domain is a second enterprise (column 6, lines 39-48).

18. As per claims 13-17, contain similar limitations as claims 1-12 above, therefore are rejected under the same rationale.

19. As per claim 18, Aggarwal et al teach a method for enabling inter-enterprise agent communication comprising the steps of:

- a) grouping agents into a first group in a first domain; (Figure 2, clients 64 grouped into domain 60A)

- b) assigning a coordinator to the agents in the first group; (column 14, lines 36-40 and Figure 2, 68; bridgehead server)

- c) send-message service of the coordinator with a service bus; (column 2, line 23-45)

- d) the coordinator receiving messages from a second domain; wherein the messages are directed to an agent in the first group; (column 14, lines 36-40) and

e) the coordinator forwarding the messages to an intended recipient agent; wherein the service bus provides inter-enterprise communication services between the first domain and the second domain (column 3, lines 4-9 and column 10, lines 10-26).

20. Aggarwal et al fail to show a method of registering a service.

21. However Massarani shows a network that includes a DHCP (Dynamic Host Control Protocol) server that registers users by assigning IP addresses (abstract). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Aggarwal et al and Massarani to create a method for enabling communication between a first agent and a second agent by registering a message service because doing so would provide agents the ability to communicate using messages

22. As per claims 19 and 20, they contain the same limitations as claims 12 and 7, therefore are rejected under the same rationale.

23. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aggarwal et al (U.S. Patent No. 6,415,318) in view of Massarani (U.S. Patent No. 6,393,484) as applied to claim 1 above, and further in view of Wray et al (U.S. Application No. US 20010005883).

24. As per claim 5, Aggarwal et al and Massarani fail to teach a method wherein the service bus is the E-speak service bus.

25. However, Wray et al teach the use of E-speak technology (page 10, paragraph 149 line 1 – paragraph 150, line 12).

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Aggarwal et al, Massarani, and Wray et al to create a method that uses a bus with E-speak technology because doing so would reduce the time and effort to produce e-services with a common operating environment in which to conduct business.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lewis et al (U.S Patent No. 6,457,049) show an enterprise wide software system. Bowen, JR (U.S. Application No. 2001/0047305) shows a system and method for conducting business-to-business communications. Davidson et al (U.S. Application No. 2002/0065906) show a method and apparatus for tunneled communication in an enterprise network. Traversat et al (U.S. Application No. 2002/0184358) show peer-to-peer communications pipes. Taylor et al (U.S. Patent No. 6,256,676) show an agent-adaptor architecture for use in enterprise application integration systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey M Refai whose telephone number is (703) 605-4361. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramsey M Refai
Examiner
Art Unit 2154

RMR
June 9, 2004


JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100